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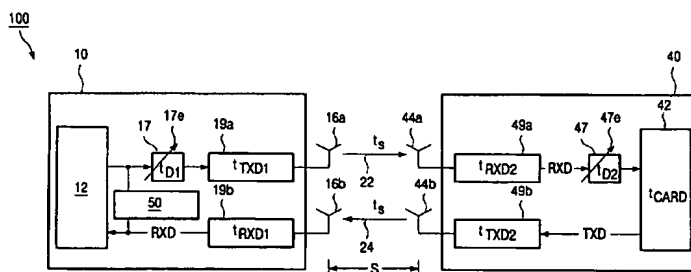
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(54) Title: ELECTRONIC COMMUNICATION SYSTEM AND METHOD OF DETECTING A RELAY ATTACK THEREON



(57) Abstract: In the case of an electronic communication system (100) having: a) at least one base station (10) having at least one antenna unit (16: 16a, 16b), in particular in coil form, which base station (10) is arranged in particular on or in an object to be secured against unauthorized use and/or against unauthorized access, such as on or in, say, a means of transport or on or in an access system, and, b) at least one transponder station (40), in particular in data-carrier form, having at least one antenna unit (44: 44a, 44b), in particular in coil form, which transponder station (40), c) may in particular be carried with him by an authorized user and/or, d) is designed to exchange data signals (22, 24) with the base station (10), in which case, by means of the data signals (22, 24), e) the authorization for use and/or access can be determined and/or, f) the base station (10) can be controlled accordingly, and in the case of a method of detecting and/or guarding against at least one, in particular external, attack, and preferably at least one relay attack, on an electronic communication system (100) of this kind, to enable the electronic communication system (100) and the method to be further developed in such a way that the attack is at least made substantially more difficult and if possible is fully guarded against and prevented, it is proposed that, g) there be arranged in the base station (10) at least one first delay element (17) for setting a defined, and in particular substantially constant, signal transit time (t_1) within the base station (10) and/or, h) there be arranged in the transponder station (40) at least one second delay element (47) for setting a defined, and in particular substantially constant, signal transit time (t_2) within the transponder station (40).

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Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 983 916 A (MARQUARDT GMBH) 8 March 2000 (2000-03-08) abstract paragraph '0005! - paragraph '0013! paragraph '0030! - paragraph '0031! -----	1-10
A	EP 1 004 726 A (MANNESMANN VDO AG) 31 May 2000 (2000-05-31) abstract paragraph '0004! - paragraph '0008! -----	1-10
A	US 6 353 776 B1 (ROEHL THOMAS ET AL) 5 March 2002 (2002-03-05) abstract column 1, line 55 - column 3, line 22 -----	1-10



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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